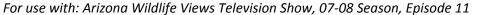
Sharing a Story





Time Frame: 2-3 hours Human-Environment Interactions; Natural Disasters; **Persuasive Writing**

Overview:

This video starts with a look at the Scholastic Clay Target Program at the state and national levels. Then, it moves into a story about National Hunting and Fishing Day and some of the ways that Arizona celebrated. The last story, which focuses on Lake Powell, is a tribute to the popular and prolific outdoor writer, Bob Hirsch, who passed away this year. Students will have the opportunity to study Hirsch's work and write their own magazine article.

Essential Questions						
0	How can human activities benefit and harm					
	wildlife?					
_	What tackniques do writers use to engage an					

What techniques do writers use to engage and persuade their audience?

Objectives

- o Identify the ways in which hunters and anglers conserve wildlife.
- Explain the impact of drought to a desert lake ecosystem.
- o Analyze the impact of dams to economic and environmental well-being of Arizona.
- o Identify and analyze the tools and techniques of a successful nature writer.
- o Write a magazine article in the style of a popular nature writer.

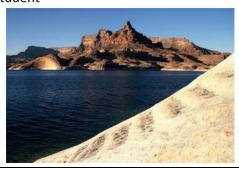
Arizona Department of Education Standards

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4 th grade	5 th grade	6 th grade	7 th grade	8 th grade				
S3-C1-PO1	S3-C1-PO1		S3-C1-PO1					
S3-C1-PO2			S3-C1-PO2					
S6-C2-PO2								
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Reading								
4 th grade	5 th grade	6 th grade	7 th grade	8 th grade				
S1-C4-PO4	S1-C4-PO4	S1-C4-PO4	S1-C4-PO4	S1-C4-PO4				
S3-C3-PO1	S3-C3-PO1	S3-C3-PO1	S3-C3-PO1	S3-C3-PO1				
	S3-C3-PO3	S3-C3-PO3	S3-C3-PO3	S3-C3-PO3				
Writing								
4 th grade	5 th grade	6 th grade	7 th grade	8 th grade				
S2-C3-PO2	S2-C3-PO2	S2-C3-PO2	S2-C3-PO2	S2-C3-PO2				
S2-C4-PO2	S2-C4-PO2	S2-C3-PO4	S2-C3-PO4	S2-C3-PO4				
S3-C4-PO1	S2-C4-PO4	S2-C4-PO1	S2-C4-PO1	S2-C4-PO1				
	S3-C4-PO1	S2-C4-PO4	S2-C4-PO4	S2-C4-PO4				
		S3-C4-PO1	S3-C4-PO1	S3-C4-PO1				

Materials and Resources

- Copy of Arizona Wildlife Views episode
- Set of "Hoots and Howls" articles 1 per student



Teacher Preparation

- Acquire a copy of the television show. You can check local listings to determine when it will air and record it directly. You may also check the Department's web site to see if a copy can be downloaded or ordered.
- Write the vocabulary words and questions on the board.
- Review the three Arizona Wildlife Views "Hoots and Howls" articles provided. Select one to three of them to have your students read and analyze. Photocopy the selected articles.

Background Information:

This is not a lesson plan in the traditional sense. It does not provide step-by-step directions for completing an activity. Instead, it provides information to help you use an episode of the Arizona Wildlife Views television program in your classroom. It contains four suggested activities along with extensions and modifications. The first activity focuses on vocabulary. We have provided and defined some of the words used in the video. You are encouraged to use any appropriate strategies to introduce these to your students. Then, there is a series of comprehension questions that students can answer while watching the video. Answers (directly from the video) are provided in italics. Next, the critical thinking questions build on the major concepts introduced in the video. Students need to put a little bit more thought into these questions. Some reasonable answers are provided in italics. However, teachers should be cautious and realize that students may provide additional answers that can be supported with evidence. Finally, there is an in-depth activity. This activity allows students to evaluate and synthesize one or more of the concepts from the video, perhaps applying it to a new context or utilizing additional skills.

This episode originally aired on PBS (KAET, Channel 8) in Phoenix on April 20, 2008. It may

also be shown on regional PBS stations or other channels. For additional viewing information or download options, please visit http://www.azgfd.gov/focuswild.

Additional information about the animals featured in this episode can be found at:

- ✓ Arizona Scholastic Clay Target Program: http://www.azgfd.gov/outdoor_recreation/scholastic_claytarget.shtml
- ✓ National Scholastic Clay Target Program: http://www.nssf.org/sctp/index.cfm
- ✓ National Hunting and Fishing Day: http://www.nhfday.org/
- ✓ Glen Canyon National Recreation Area: http://www.nps.gov/glca/
- ✓ Rainbow Bridge National Monument: http://www.nps.gov/rabr/

Relevant Vocabulary:

- Angler a person who fishes
- Center of gravity the point at which a body is balanced in all directions
- Excise tax a fee on a particular product,
 such as camping equipment
- O Gorge a deep, narrow canyon
- Heritage the culture and traditions passed from one generation to the next
- Novice a beginner
- Recoil the backward movement of a gun when it is fired
- Reservoir a pond or lake used to collect and store water

Comprehension Questions:

- 1. Where is the U.S. Olympic training Center located? Answer: Colorado Springs, Colorado.
- 2. How many athletes participated in the Scholastic Clay Target Program (SCTP) nationally this past year? Answer: Nearly 9,500 students from 44 states.
- 3. According to Lloyd Woodhouse, what three things do you need in order to be a good shooter? Answer: Motivation, family support, and good hand-eye coordination.
- 4. How many former SCTP participants are currently on the USA shooting team? Answer: 3.
- 5. When was National Hunting and Fishing Day established? By whom? Answer: Congress in
- 6. What is the largest natural bridge in the world? Answer: Rainbow Bridge.
- 7. Which dam created Lake Powell? Answer: Glen Canyon Dam.
- 8. How long did it take for Lake Powell to fill? Answer: 17 years.
- 9. How long is Lake Powell? *Answer: 186 miles*
- 10. What was the gold found in the desert sand called? Answer: Flour gold.

Critical Thinking Questions:

- 1. How do hunters and anglers help wildlife conservation efforts? Answer: Every year, they spend over \$1 billion on licenses and excise taxes on sporting equipment. This money is used to fund wildlife conservation programs and habitat acquisition. In addition, many hunters and anglers belong to sportsmen's groups who provide thousands of hours of volunteer work, raise additional funds, and push for legislation to improve wildlife and habitat.
- 2. Bob Hirsch describes the landscape of Lake Powell as "rocks from the depth of time." What do you think he meant by this statement? Answer: The rocks in this area have been around for millions of years. Buried within their depths is the evidence and stories of wildlife of the past. The lake

- provided scientists with easier access to some of these remnants. In addition, as the water level lowers, new rocks become exposed, reaching further into the past.
- 3. Explain how the drought has actually been beneficial to the fish in Lake Powell. Answer: As the lake lowers, sediment that has been buried for years becomes exposed to the elements. The wind and waves pound against the newly exposed sediment, releasing stored nutrients. These nutrients are then taken up by plants in the lake. These plants are eaten by plankton, causing their populations to increase. Since these are the base of the food chain, animals at all levels will also increase.
- 4. In your opinion, has the construction of the Glen Canyon Dam been more beneficial or more harmful to Arizona? Answer: There have been both benefits and costs to the dam construction. The dam provides water storage, a necessity for all of those living in the Arizona deserts, and generates relatively cheap electricity. In addition, thousands of people use the lake for recreation every year. However, the dam did destroy Glen Canyon and has lowered water flow, impacting ecosystems downstream.

In-Depth Activity: Nature Writing

Bob Hirsch was a well-known nature writer. His stories about his outdoor experiences delighted readers for years. But what was it about his writing that people enjoyed?

Read the articles that your teacher provides. As you read, answer the following questions:

- Who is Hirsch's audience?
- What is his purpose for writing the articles?
- What strategies does the author use to engage the reader?
- Identify figurative language (i.e., hyperbole, personification, similes, metaphors, etc.) that he uses. What is his purpose for using these?

Be sure to support your answers with actual examples from the articles.

Now that you have had the opportunity to read some articles from a popular nature writer, you are going to make your own attempt at writing about the outdoors.

Think about an experience you had in the outdoors. Perhaps it was a fishing trip in which nothing went right and the fish weren't biting.

Perhaps it was a hike with awe-inspiring views or the first time you slept beneath the stars. Maybe it was something simpler like running through the rain or watching a bird in your backyard. Whatever the experience was, try describing it. Write a short article that could appear in a local outdoor magazine. Make your reader feel like he or she was there. Use some of the techniques and strategies that Hirsch used.

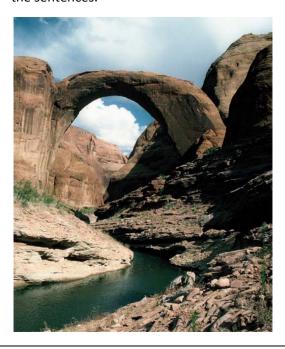
Differentiated Instruction:

Extensions:

- o **Geography:** Lake Powell has nearly 2000 miles of shoreline. How is it possible to squeeze such a large amount of shoreline into such a small space? Looking at a map, try to measure the shoreline of the Pacific coast of the United States. How much larger is the lake's shoreline? How does the Atlantic coast compare? Can you identify other lakes in the country that may have longer shorelines?
- o Science: Dams use turbines, or water wheels, to produce electricity. Running water turns the turbines. This turning motion generates electricity. You can model this system in your classroom or home. Find a round object (such as a bottle cap or cork). Stick a wooden kitchen skewer or something similar through the center of your object. This is the base of your turbine. Use common household materials to create the "wings" of your turbine. These will be used to spin the object when water falls onto it. Tie one end of a length of string to the skewer. On the other end, attach a small weight (perhaps a cup with pennies inside). Balance the ends of the skewer on two fingers. Place the turbine under a faucet with running water. How well does your turbine work? Is it able to lift the weight? What can you do to make your turbine more effective?

Modifications:

- o Create a student handout with the vocabulary words and questions already provided.
- o Provide students with the definitions and have them match them to the appropriate vocabulary words.
- o Provide fill-in-the-blank responses for the Comprehension Questions, allowing students to listen for appropriate words to complete the sentences.



Reflection:

Use the space below to reflect on the success of the lesson. What worked? What didn't? These notes can be used to help the next time you teach the lesson. In addition, the Department would appreciate any feedback. Please visit http://www.azgfd.gov/focuswild and submit a lesson evaluation.

Fear Factor

Are you a fan of the TV

show "Fear Factor"? You know, the contestants have to do all sorts of scary things — including eat some really nasty stuff — to win big money. The fear factor pops up on some of my outdoor adventures, too.

I'd never tried rappelling, for example. Oh, I'd seen it done in movies — usually a Marine going down a cliff on a rope, kicking away from the sheer rock wall and controlling the fall by sliding the rope around his body. No, thank you.

So there I was in Australia at a resort in the rain forest and the head ranger said they were going to go abseling after lunch. I volunteered. It turned out "absel" is the German word for "down rope." Yup, I'd just signed up to imitate a Marine.

We practiced first on a house-sized boulder, backing down a 45-degree slope with the rope as support. No problem. Then we hiked to the edge of a deep valley. When it was my turn, I backed off the rim and experienced fear factor, big time.

I was talking to the ranger the next day and asked him how high that cliff had been. He responded in meters and I replied that didn't mean much to me — how high a building did it represent? "Oh, probably 30 stories," he told me. Man, I'm glad I didn't know that when I went off the

"Ever eat one of those?" I asked. "They're delicious."

her family to Big Lake on a fishing trip. I was out in a boat with Rita; her husband, Dave; and their two small boys, and action was a little slow. The three-year-old was playing with a box of night crawlers we'd brought along for bait. He had one of the big worms all cleaned off and he told me he was going to take it home for a pet.

> "Ever eat one of those?" I asked. "They're delicious." When he said, "No," I opened my mouth wide and pretended to toss the worm in and chew it up.

> > I actually threw it over my shoulder into the lake. My new buddy took out another worm, cleaned it off and promptly put it in his mouth and swallowed it. The fear factor? You should have heard Rita scream.

> > > Then there was my friend Pete, who was taking his son, Scott, on the 10-year-old's first deer hunt. Sneaking through the woods the first morning, they came upon a heap of deer drop-

pings - old, dried-up pellets.

"Scott, you're in luck," Pete told his boy. "These are smart pills, and if you eat one, you're sure

to get a deer." So Scott did.

Eat one.

And got a deer, too.

No fear.

edge on that thin rope.

The TV show guys and gals always have to test their gag reflexes by downing some nasty creatures. My outdoor trips haven't had any of that. Oh, there was the time I took TV cooking guru Rita Davenport and

■ Bob Hirsch says, "Scott told me his fear factor was extreme a couple of years later, when his dad told him what he'd really eaten."

You Can't Handle the Truth

THE BRAINS OF ALL ANGLERS are cluttered with idealized pictures of their sport. They remember what they want to remember — and that may be a long way from what really happened. They forget the bad trips and embellish the good ones without shame. Those good memories should stand on their own, events to be cherished forever — no matter how many monsters were fooled, played skillfully and then released in a day. Instead, the truth of those outings will be stretched, manipulated, burnished and added to for years, until even the participants can hardly recognize it. In fact, eventually the hype-sters begin to believe their own hype.

Of course, some outings don't need embellishment: They are so good, nobody believes you when you tell the truth.

Once, back in the early 1970s, 30 of us

But I can tell by the raised eyebrows and slight smiles that nobody believes a word of it.

took three houseboats up Lake Powell to the Escalante River arm. We ended up in a small cove, not even big enough to be named on the map. There we fished for crappies from Friday noon to Sunday noon, when we reluctantly pulled up anchor and headed down the lake to the real world.

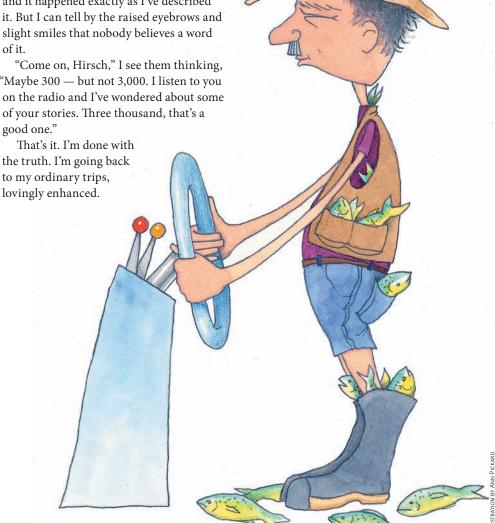
During those two days, our bunch caught more than 3,000 crappies averaging 1½ pounds each, plus a good number of bass weighing up to 5 pounds each. Three thousand seems like a lot, but with 30 of us, that only means 50 fish per day, per person. Of course, some of the women didn't fish much and the rest of us had to take up the slack. We ate crappie fillets for lunch and dinner and brought back bags and bags for

everybody. There were no limits on crappies in those days.

One more observation: When we left on Sunday, the crappies were still biting just as well as they were when we pulled in on Friday. We hadn't made much of a dent in the population, even in that one little spot. A final fact: Lake Powell is 180 miles long, with 96 major side canyons and hundreds of tiny coves like the one we fished. So it's safe to say the lake right then contained millions — probably tens of millions — of crappies.

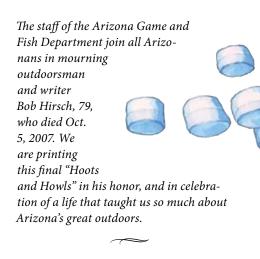
I've told people about that trip for years and it happened exactly as I've described it. But I can tell by the raised eyebrows and slight smiles that nobody believes a word of it.

"Come on, Hirsch," I see them thinking, "Maybe 300 — but not 3,000. I listen to you on the radio and I've wondered about some of your stories. Three thousand, that's a good one."



It's obvious Jack Nicholson was talking to my audience when he said his famous movie line, "You can't handle the truth!"

• Funny thing. It turns out all the other anglers on that trip have since moved out of Arizona, so it would be impossible to validate the story. But you can trust Hirsch.



LET US NOW PAY HOMAGE TO

the mighty trout, that most gorgeous of creatures, the fish that has spawned a million stories.

The gaudy, wily, beautiful, intelligent trout routinely humbles superbly equipped anglers, fishermen who have spent thousands of dollars to look exactly like those on the cover of the latest catalog, fishermen who know the Latin names of all the insects

Ah, it is the stuff of dreams.

So why is this noble trout routinely caught on things like bite-sized marshmallows, Velveeta cheese, live worms as long as your pointer finger, maggots, minnows, liver, whole kernel corn, canned peas and something that comes in a small, very expensive jar and has the consistency of modeling clay? You mould a gob of it on your hook and big, flashy trout - those super-smart, impossible-to-fool paragons of angling legend; those wily, spooky, muchto-be-desired creatures — gobble it up.

I'd wager more trout are caught each year on this list of unlikely fish-foolers than on all the exquisitely tied flies or handsome hunks of flashy hardware put together.

Yes, let's all shed a tear for the handsomely dressed and superbly equipped guys and gals on the covers of those catalogs. Our trout stuff comes mostly from the gro-

cery store, our hats say "Joe's Used Tires," and our T-shirts read "I'm with Stupid."

Is all this true? Oh, yes. I remember a time back in the '70s when bite-sized marshmallows were all the rage at places like Big Lake. You clamped a splitshot sinker on your line, about 15 inches up from the hook, then cast. The sinker went to the bottom and the marshmallow floated up where the trout could see it. There was a drawback - as there is to all trout-catching techniques. The marshmallow didn't last long before it got so soft it came off the hook and floated to the surface.

I remember one sunny morning when 50 boats were anchored off Fishermen's Point at Big Lake — all fishing with marshmallows. Then, the inevitable happened: As hundreds, perhaps thousands of spent marshmallows dotted the surface of the lake, the trout began to come up and noisily slurp them off the water. It was the marshmallow equivalent of a mayfly hatch.

It was a wild scene, and I swear I saw, off in the distance at the edge of the fleet of boats, a solitary angler, standing in his boat, using a fly rod and making the kind of casts you see on the videos. I'm sure he planned

to go home and tie up a marshmallow fly, but right then he was using the real thing.

I remember one

sunny morning

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Fishermen's Point

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marshmallows

I swear that angler was not me (although it would have been, if I had thought of it first). In spite of all the noble thoughts — all the glamour and hype — whatever works best is what we all use. 4

 Arizona Wildlife Views magazine enjoyed a long, productive relationship with Bob Hirsch. Our tribute to his memory is on Page 2.

-Arizona Wildlife Views staff